

LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-22 (Canceled).

Claim 23. (Currently amended) A method of recovering a **lignocellulosic element from constituent of** a board material comprised of a matrix of adhesively bonded lignocellulosic elements, the method comprising

- (a) swelling the material by subjecting the material to a combination of (i) electromagnetic radiation and (ii) soaking or immersion in a liquid medium, wherein the electromagnetic radiation has a frequency in the range of from 896 ± 20 MHz to 2450 ± 25 MHz or a frequency in the range of from 100 kHz to 100 MHz, and
- (b) recovering the **lignocellulosic element constituent**.

Claim 24. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the electromagnetic radiation has a frequency of 896 ± 20 MHz.

Claim 25. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the electromagnetic radiation has a frequency of 2450 ± 25 MHz.

Claim 26. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the electromagnetic radiation has a frequency in the range of from 10 MHz to 50 MHz.

Claim 27. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the power of the electromagnetic radiation is in the range of from 500 W to 30 kW.

Claim 28. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the liquid medium comprises water.

Claim 29. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the liquid medium comprises an organic or inorganic solvent.

Claim 30. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the board material is initially subjected to the electromagnetic radiation (step (i)) and then immersed in the liquid medium (step (ii)).

Claim 31. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the liquid medium is at elevated temperature.

Claim 32. (Previously presented) A method as claimed in claim 31, wherein the liquid medium is at a temperature of from 60° to 90°C.

Claim 33. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the board material is immersed in the liquid medium and subjected to the electromagnetic radiation while immersed.

Claim 34. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the treated board material is subjected to mechanical agitation in the liquid medium to produce a fibrous suspension.

Claim 35. (Currently amended) A method as claimed in claim 34, wherein **the lignocellulosic element lignocellulose** is recovered from the fibrous suspension.

Claim 36. (Currently amended) A method as claimed in claim 35, wherein the **lignocellulosic element lignocellulose** is recovered by drying of the suspension.

Claim 37. (Currently amended) A method as claimed in claim **23** **[[1]]**, wherein the board material is lignocellulose based board material and is or comprises a particle board or fibre board.

Claim 38. (Previously presented) A method as claimed in claim 37, wherein the lignocellulose based board material is or comprises Medium Density Fibreboard.

Claim 39. (Currently amended) A method as claimed in claim **23** ~~[[1]]~~, wherein the electromagnetic radiation comprises microwaves.

Claim 40. (Currently amended) A method as claimed in claim **23** ~~[[1]]~~, wherein the electromagnetic radiation comprises radio frequency (RF) waves.

Claim 41. (Currently amended) A method of recovering a **lignocellulosic element** ~~**lignocellulose constituent**~~ of a board material comprised of a matrix of adhesively bonded lignocellulosic elements, the method comprising

(a) swelling the board material by subjecting the board material to a combination of (i) electromagnetic radiation having a frequency in the range of from 10 MHz to 2500 MHz and a power level in the range of from 500 W to 30 kW, and (ii) soaking or immersion in a liquid medium at a temperature in the range of 60 C to 90 C,

(b) mechanically agitating the board material in the liquid medium to produce a fibrous suspension, and

(c) recovering the **lignocellulosic element** ~~**lignocellulose constituent**~~ from the fibrous suspension.

Claim 42. (Currently amended) A method of recovering a **lignocellulosic element** ~~**lignocellulose constituent**~~ of a board material comprised of a matrix of adhesively bonded lignocellulosic elements, the method comprising

(a) swelling the board material by (i) subjecting the board material to electromagnetic radiation having a frequency in the range of from 10 MHz to 2500 MHz and a power level in the range of from 500 W to 30 kW for between 30 and 90 seconds, followed within 5 to 15 seconds by (ii) soaking or immersion in a liquid medium at a temperature in the range of 60 C to 90 C for between 10 and 25 minutes,

(b) mechanically agitating the board material in the liquid medium to produce a fibrous suspension, and

(c) recovering the **lignocellulosic element** ~~**lignocellulose constituent**~~ from the fibrous suspension.

Claim 43. (New) The method of claim 23 wherein recovering the lignocellulosic element comprises recovering lignocellulose.